

IN THE CLAIMS:

Please cancel Claims 7, 15 and 16 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 3, 4, 8, 9-11 and add new Claims 17-22 as follows.

Claims 1 and 2. (Cancelled).

3. (Currently Amended) A manipulator comprising:

a contact portion to facing a manipulation target object;

a pressure chamber;

fluid control means for controlling pressure in said pressure chamber;

and

an opening at said contact portion, said opening communicating with

said pressure chamber, wherein

the target object is manipulated by causing said fluid control means to control ~~inflow/outflow~~ inflow and/or outflow of a fluid through said opening, and wherein

the manipulator is ~~a gripper type manipulator having~~ has a plurality of said contact portions at opposite positions ~~and clamping the target object by said contact portions~~, and

~~each of said contact portions has said opening for which the inflow/outflow of the fluid is controlled by said fluid control means~~

said fluid control means executes at least one of ejection of the fluid from the openings which oppose each other on both sides and are located on a side opposite to a direction in which the target object should be fed and drawing of the fluid from the openings which oppose each other on both sides and are located on the same side as the direction in which the target object should be fed.

4. (Currently Amended) The manipulator according to claim 3, wherein said contact portion has a recessed portion which is fitted on the target object to clamp the target object, and

the said contact portion having said recessed portion has the opening for which the ~~inflow/outflow~~ inflow and/or outflow of the fluid is controlled by said fluid control means.

5. (Previously Presented) The manipulator according to claim 3, wherein said fluid control means controls attitude of the target object by generating a couple of forces by executing at least one of ejection and drawing of the fluid to a position shifted from a center of gravity of the target object.

6. (Previously Presented) The manipulator according to claim 4, wherein said fluid control means controls attitude of the target object by

generating a couple of forces by executing at least one of ejection and drawing of the fluid to a position shifted from a center of gravity of the target object.

Claim 7. (Cancelled).

8. (Currently Amended) The manipulator according to claim 4, wherein said fluid control means performs an operation of feeding the target object by executing at least one of ejection of the fluid from the openings which are ~~oppose~~ opposite each other on both sides and located on a side opposite to a direction in which the target object should be fed and drawing of the fluid from the openings which oppose each other on both sides and are located on the same side as the direction in which the target object should be fed.

9. (Currently Amended) ~~The A~~ manipulator comprising; according to claim 3, wherein

a contact portion facing a manipulation target object;

a pressure chamber;

fluid control means for controlling pressure in said pressure chamber;

and

an opening at said contact portion, said opening communicating with

said pressure chamber, wherein

the target object is manipulated by causing said fluid control means to control inflow and/or outflow of a fluid through the opening.

the manipulator has a plurality of said contact portions at opposite positions, and

said fluid control means ~~performs an operation of feeding the target object by controlling~~ controls the fluid to make the fluid flowing through the openings on the same side as a direction in which the target object should be fed have a flow velocity different from that of the fluid flowing through the openings on a side opposite to the direction in which the target object should be fed.

10. (Currently Amended) The manipulator according to claim 4, wherein ~~the said~~ fluid control means performs an operation of feeding the target object by controlling to make the fluid flowing through the openings on the same side as a direction in which the target object should be fed have a flow velocity different from that of the fluid flowing through the openings on a side opposite to the direction in which the target object should be fed.

11. (Currently Amended) The manipulator according to claim [[1]] 3, wherein said pressure chamber is connected to a separated fluid storage and a feeding device.

Claims 12-16. (Cancelled).

17. (New) The manipulator according to claim 9, wherein
said contact portion has a recessed portion which is fitted on the target
object to clamp the target object, and

said contact portion having said recessed portion has the opening for
which the inflow and/or outflow of the fluid is controlled by said fluid control means.

18. (New) The manipulator according to claim 9, wherein
said fluid control means controls attitude of the target object by
generating a couple of forces by executing at least one of ejection and drawing of the fluid to a
position shifted from a center of gravity of the target object.

19. (New) The manipulator according to claim 17, wherein
said fluid control means controls attitude of the target object by
generating a couple of forces by executing at least one of ejection and drawing of the fluid to a
position shifted from a center of gravity of the target object.

20. (New) The manipulator according to claim 17, wherein
said fluid control means performs an operation of feeding the target
object by executing at least one of ejection of the fluid from the openings which are opposite
each other on both sides and located on a side opposite to a direction in which the target object

should be fed and drawing of the fluid from the openings which oppose each other on both sides and are located on the same side as the direction in which the target object should be fed.

21. (New) The manipulator according to claim 17, wherein said fluid control means performs an operation of feeding the target object by controlling to make the fluid flowing through the openings on the same side as a direction in which the target object should be fed have a flow velocity different from that of the fluid flowing through the openings on a side opposite to the direction in which the target object should be fed.

22. (New) The manipulator according to claim 9, wherein said pressure chamber is connected to a separated fluid storage and a feeding device.